

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

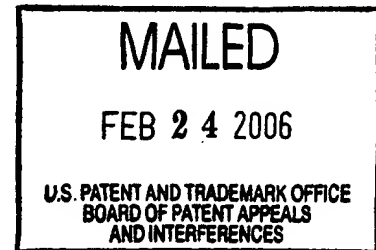
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte Andrew A. Dahl

Appeal No. 2005-2268
Application No. 09/976,683

ON BRIEF



Before McKELVEY, *Senior Administrative Patent Judge*, and BARRY and MacDONALD,
Administrative Patent Judges.
BARRY, *Administrative Patent Judge*.

A patent examiner finally rejected claims 1-13. The appellant appeals therefrom
under 35 U.S.C. § 134(a). We affirm.

I. FINDINGS OF FACT

A. Invention

1. The invention concerns information kiosks.
2. Large billboards are used for advertising in public places such as airports,
malls, and plazas. (Spec., p. 1, ll. 18-19.)

3. Although electronic displays are sometimes used for the same purpose, (*id.* at ll. 19-20), renting space in such places is costly. (*Id.* at p. 2, ll. 1-2.)

4. Furthermore, according to the appellant's specification ("the specification"), the hardware necessary to display videos on electronic displays is also expensive. (*Id.* at ll. 2-3.)

5. The appellant's invention mounts a large electronic screen to an interactive terminal. The screen normally displays an image for viewing by passersby. (*Id.* at ll. 19-20.)

6. The terminal is operated via a touch screen or a key pad. When a person steps up to the terminal and touches its touch screen or key pad, the lowermost section of the screen displays a user interface. (*Id.* at p. 3, ll. 4-7.)

7. When the terminal is in use, furthermore, chromogenic privacy panels are rendered opaque to block viewing of the user interface by passersby. (*Id.* at p. 11, ll. 7-9.)

8. According to the specification, combining the electronic screen and the interactive terminal, maximizes usage of display hardware "to improve its cost effectiveness and to enhance its commercial value by providing other modes of commercial promotion." (*Id.* at p. 2, ll. 6-8.)

B. Rejections

1. Claims 1, 2, 4-7, and 9 stand rejected as unpatentable under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 6,543,684 ("White"). The examiner also cites U.S. Patent No. 6,603,447 ("Ito") to rebut arguments made by the appellant in his appeal brief.

2. Claims 8, 10, 11, and 13 stand rejected as unpatentable under § 103(a) as obvious over White and U.S. Patent No. 6,536,658 ("Rantze"). The examiner also cites Ito to rebut arguments made by the appellant in his brief.

3. Claims 3 and 12 stand rejected as unpatentable under § 103(a) as obvious over White; Rantze; and U.S. Patent No. 6,239,898 ("Byker"). The examiner also cites Ito to rebut arguments made by the appellant in his appeal brief.

C. Representative Claims

1. "[T]o assure separate review by the Board of individual claims within each group of claims subject to a common ground of rejection, an appellant's brief to the Board must contain a clear statement for each rejection: (a) asserting that the patentability of claims within the group of claims subject to this rejection do not stand or fall together, and (b) identifying which individual claim or claims within the group are separately patentable and the reasons why the examiner's rejection should not be sustained." *In re McDaniel*, 293 F.3d 1379, 1383, 63 USPQ2d 1462, 1465 (Fed. Cir. 2002) (citing 37 C.F.R. §1.192(c)(7)). "If the brief fails to meet either requirement, the Board is free to select a single claim from each group of claims subject to a common ground of rejection as representative of all claims in that group and to decide the appeal of that rejection based solely on the selected representative claim." *Id.*, 63 USPQ2d at 1465.

2. The appellant stipulates, "The claims grouped as in the rejections stand or fall together." (Appeal Br. at 3.) Accordingly, we select claims 1, 8, and 3 from the groups as representative of the claims therein.

3. Claim 1 follows (with references to corresponding element of the appellant's figures or passages of his specification added thereto):

1. The combination of a display with an interactive terminal comprising:

a large area electronic display [12] able to exhibit large scale images poster sized viewable at substantial distances by passers by [sic], on the order of 42 inches diagonal or larger, said display mounted on a base [16];

an interactive terminal computer [18] having at least one peripheral device [28, 30, or 36] enabling interactive access to store data in said interactive terminal computer;

such display connected to said computer which generates signals normally producing a display image occupying the complete area of said electronic display in one mode [p. 5, ll. 10-11], and alternatively in another mode, generating display images confined to a lower section [32] of said electronic display [p. 5, ll. 21-22];

said interactive terminal computer having at least one peripheral [28, 30, or 36] connected thereto enabling interactive use by reference to said display image confined to said lower section [32] of said electronic display.

4. Claim 2 follows (with references to corresponding element of the appellant's figures or passages of his specification added thereto):

2. The combination according to claim 1 further including a pair of screen panels [14], each mounted on a respective side of said lower section [32] of said electronic display.

5. Claim 3 follows (with references to corresponding element of the appellant's figures or passages of his specification added thereto):

3. The combination according to claim 2 wherein said screen panels [14] are electronically changeable from a transparent to an opaque state, said panels electronically controlled by said computer to be opaque during use of said interactive terminal computer [18].

6. Claim 8 follows (with references to corresponding element of the appellant's figures or passages of his specification added thereto):

8. The combination according to claim 1 further including a motion-proximity detector [26] generating a signal upon approach of a passerby to a predetermined closeness, said computer responsive thereto to switch between said modes of display to modify a display image normally exhibited by said electronic display [12].

D. Prior Art

1. White is prior art under § 102(e).

2. White relates to "information retail terminals such as kiosk-type devices.

Such kiosks are generally located throughout the shopping area of the retail store."

Col. 1, ll. 25-27.

3. White describes a "customer service workstation (CSW) 40. . . ." Col. 4, ll. 39-40. "The CSW 40 includes a display 44. . . . The display 44 is preferably a **large**, high-quality LCD as is known in the art, but **can be any type of display**." *Id.* at ll. 55-62 (bolding added).

4. White does not expressly mention that its large display has a width on the order of 42 inches.

5. According to White, however, the large display can be used for advertising, i.e., to show "**a promotional program**, . . . program video, and the like." Col. 8, ll. 1-2 (emphasis added).

6. A display would have to be large enough to be noticed by passersby.

7. 42-inch-wide displays were known in the art. Ito, col. 3, ll. 53-54.

8. Because White invites the use of any type of display, and a 42-inch-wide display would have made White's advertising promotions noticeable to passersby, we

find that those skilled in the art would have been motivated to employ a display of any suitable size, including a 42-inch-wide display, with White's workstation.

9. Figure 2 of White shows that "the display 44 of the CSW 40 ha[s] a display area 70." Col. 7, ll. 55-57. According to White, [t]he screen depicted in FIG. 2 may be termed a customer usage mode. The customer usage mode screen is typically shown when a consumer is ready to use the CSW 40 and when the CSW 40 is in use." Col. 7, ll. 63-67.

10. White teaches switching between to modes of display, viz., (1) the customer usage mode and (2) an advertising promotional mode. Regarding the latter mode, "[w]hen the CSW 40 is not in use, the customer usage mode screen may be replaced by a promotional program, . . . program video, and the like." Col. 7, l. 67 - col. 8, l. 2.

11. White explains that "[t]he type, size, and number of windows, areas, or regions [in its display area] are not absolute and may vary according to mode or usage." Col. 7, ll. 61-63.

12. White does not mention whether the promotional program encompasses its entire display area.

13. A promotional program would have to be large enough to be noticed by passersby.

14. Rantze is prior art under § 102(e).

15. Rantze relates to "information retail terminals such as kiosk-type devices. Such information retails terminals are generally located throughout the shopping area of the retail store ." Col. 1, ll. 27-30.

16. Rantze explains that "it is desirable to provide a retail terminal that can be configured to perform in such various modes depending on the position or distance and the movement of the customer relative the retail terminal." Col. 2, ll. 54-57.

17. Rantze employs a transmitter and detector, col. 6, ll. 30-31, to operate in various modes. Specifically, "operation of the transmitter 18 and detector 20 (i.e. the detection of, proximity or distance to, and/or movement relative the kiosk 10 of a

person) provides the kiosk 10 with information that may change the mode of operation of the kiosk 10. . . ." Col. 7, ll. 35-38.

18. White's customer usage screen "includes a personal identification number (PIN) area 84 for entry of [a] [customer] loyalty ID. As well, . . . the PIN area 84 may be used to enter the PIN for a user's credit/debit/ATM card or the like." Col. 10, ll. 15-19. In the reference's customer usage mode, customers "enter[] their loyalty ID or PIN as the case may be via the video keypad 86 within the PIN area 84 via the touch-screen 60, *id.* at ll. 19-21, of White's display.

19. In White, opaque "barriers 87 and 88 . . . form a physical privacy shield about the video keypad 86 that blocks a third party from seeing the video keypad 86 and thus a user's PIN during PIN entry." Col. 11, ll. 39-42.

20. White does not expressly mention that its barriers can be changed between opaque and transparent states.

21. In its advertising mode, when White's workstation is showing a promotional program rather than interacting with a user, displaying a video keypad is unnecessary

and would reduce from the space available for the promotional program, which would make the program less noticeable to passersby.

22. In its advertising mode, when White's workstation is showing the promotional program rather than interacting with a user, opaque barriers would undesirably obscure a passerby's view of the program.

23. Byker is prior art under § 102(e).

24. Byker describes an "electrochromic . . . panel or partition in the interior of a building. . . ." Col. 3, ll. 25-27. The panel may be transparent or "may be darkened, as desired, for privacy purposes." Col. 2, ll. 21-22. More specifically, the panel "includes a thin layer 14 of an electrochromic medium disposed between two glass or plastic transparent substrates 16 and 18. When electrical potential is applied to the electrochromic medium 14, the electrochromic medium darkens and begins to absorb light. The higher the voltage, the darker the [panel] becomes. When the electrical voltage is decreased to zero, the [panel] returns to its clear state." *Id.* at ll. 38-45.

25. The references establish the level of ordinary skill in the art. *See In re GPAC Inc.*, 57 F.3d 1573, 1579, 35 USPQ2d 1116, 1121 (Fed. Cir. 1995) (finding that

the Board of Patent Appeals and Interference did not err in concluding that the level of ordinary skill was best determined by the references of record); *In re Oelrich*, 579 F.2d 86, 91, 198 USPQ 210, 214 (CCPA 1978) ("[T]he PTO usually must evaluate ... the level of ordinary skill solely on the cold words of the literature.").

II. DISCUSSION

We address the claims in the following order:

- Group 1: claims 1, 2, 4-7, and 9
- Group 2: claims 8, 10, 11, and 13
- Group 3: claims 3 and 12.

A. CLAIMS 1, 2, 4-7, AND 9

The appellant argues, "there is no suggestion that [White's] entire screen area have a single image displayed in one mode of operation. Each area is described in White et al. as remaining dedicated to a certain type of image." (Appeal Br. at 4.)

In addressing the point of contention, we conduct a two-step analysis. First, we construe the representative claim at issue to determine its scope. Second, we determine whether the subject matter of the construed claim would have been obvious.

1. Claim Construction

"Analysis begins with a key legal question — *what is the invention claimed?*" *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1567, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987). In answering the question, we "give claims their broadest reasonable construction. . . ." *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1668 (Fed. Cir. 2000).

Here, claim 1 recites in pertinent part the following limitations: "normally producing a display image occupying the complete area of said electronic display in one mode. . . ." Giving the representative claim its broadest, reasonable construction, the limitations require showing an image that occupies the entire area of a display.

2. Obviousness Determination

"Having determined what subject matter is being claimed, the next inquiry is whether the subject matter would have been obvious." *Massingill*, at *3. The question of obviousness is "based on underlying factual determinations including . . . what th[e] prior art teaches explicitly and inherently. . . ." *In re Zurko*, 258 F.3d 1379, 1383, 59 USPQ2d 1693, 1696 (Fed. Cir. 2001) (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966); *In re Dembiczak*, 175 F.3d 994, 998, 50 USPQ

1614, 1616 (Fed. Cir. 1999); *In re Napier*, 55 F.3d 610, 613, 34 USPQ2d 1782, 1784 (Fed. Cir. 1995)). "A *prima facie* case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art." *In re Bell*, 991 F.2d 781, 783, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)).

Here, because White's display shows a promotional program in its advertising mode, and a promotional program would have large enough to be noticed by passersby, we find that teachings from the prior art would appear to have suggested showing promotional images that occupy White's entire display area. Therefore, we affirm the rejection of claim 1 and of claims 2, 4-7, and 9, which fall therewith.¹

B. CLAIMS 8, 10, 11, AND 13

The examiner correctly finds, "**White et al. teaches** of method of using an electronic display both as an electronic billboard and as a display for an interactive

¹We have not overlooked the appellant's argument to the effect that White does not expressly describe a display having a width of 42-inches. Relying on Ito's 42-inch display, however, the examiner had a complete response.

terminal, **figure 4, column 8 lines 3-27. . . .**" (Examiner's Answer at 6.) He further correctly finds, "[t]he device of Rantze switches between various mode of operation based on . . . sensed motion. . . ." (*Id.* at 7.) The appellant argues, "[w]hile Rantz [sic] contemplates some change in mode, there is no suggestion of a change in the display in different areas of a screen." (Appeal Br. at 5.)

1. Claim Construction

Claim 8 recites in pertinent part the following limitations: "a motion-proximity detector generating a signal upon approach of a passerby to a predetermined closeness, said computer responsive thereto to switch between said modes of display to modify a display image normally exhibited by said electronic display." Giving the representative claim its broadest, reasonable construction, the limitations include switching between modes of display in response to detecting the approach of a passerby.

2. Obviousness Determination

"Non-obviousness cannot be established by attacking references individually where the rejection is based upon the teachings of a combination of references." *In re Merck*, 800 F.2d, 1091, 1097, 231 USPQ 375, 380 (Fed. Cir. 1986) (citing *In re Keller*,

642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981)). "Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art." *Cable Elec. Prods., Inc. v. Genmark, Inc.*, 770 F.2d 1015, 1025, 226 USPQ 881, 886-87 (Fed. Cir. 1985) (quoting *Keller*, 642 F.2d at 425, 208 USPQ at 881). Of course, "[w]hen determining the patentability of a claimed invention which combines two known elements, the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination." *In re Beattie*, 974 F.2d 1309, 1311-12, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992) (quoting *Lindemann Maschinenfabrik GMBH v. Am. Hoist & Derrick Co.*, 730 F.2d 1452, 1462, 221 USPQ 481, 488 (Fed. Cir. 1984)).

Here, because White switches between modes of display, and Rantze teaches the desirability of switching between modes depending on the position or distance and the movement of a customer, we find that the combined teachings of the references would have suggested switching between modes of display in response to detecting the approach of a passerby. In short, the appellant has merely used known elements for their intended purposes to achieve expected results. Therefore, we affirm the obviousness rejection of claim 8 and of claims 10, 11, and 13, which fall therewith.

C. CLAIMS 3 AND 12

The examiner correctly concludes, "[i]t **would have been obvious to the skilled artisan** at the time of the invention to combine replace the privacy panel of White with the privacy panel of Byker because the[privacy panels] solve the same problem of privacy. . . ." (Examiner's Answer at 8.) The appellant argues, "White et al. provides screens only for the image of a key pad area 86, which always displays an image of a key pad. There would thus never be a need for transparent panels to aid in viewing the image in that area." (Appeal Br. at 5.)

1. Claim Construction

Claim 3 recites in pertinent part the following limitations: "said screen panels are electronically changeable from a transparent to an opaque state, said panels electronically controlled by said computer to be opaque during use of said interactive terminal computer. " Giving the representative claim its broadest, reasonable construction, the limitations require privacy panels that can be changed between opaque and transparent states.

2. Obviousness Determination

"The suggestion or motivation to combine references does not have to be stated expressly; rather it may be shown by reference to the prior art itself, to the nature of the problem solved by the claimed invention, or to the knowledge of one of ordinary skill in the art.'" *Medical Instrumentation and Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1221-22, 68 USPQ2d 1263, 1276 (Fed. Cir.2003) (quoting *Beckson Marine, Inc. v. NFM, Inc.*, 292 F.3d 718, 728 [63 USPQ2d 1031] (Fed. Cir. 2002)). In other words, one of ordinary skill in the art knows how to use known devices for their intended purpose to achieve an expected result.

Here, one of ordinary skill in the art would have recognized the desirability of forming White's barriers 87 and 88 from electrochromic panels as taught by Byker. In White's customer usage mode, one of ordinary skill in the art would have known from the record that the barriers could be darkened to form an opaque privacy shield about the video keypad of White's workstation. In White's advertising mode, the barriers could be made transparent so as not to obscure a promotional program being shown on the display.

Because one of ordinary skill in the art would have recognized that electrochromic panels could be darkened to form an opaque privacy shield about White's video keypad to blocks a third party from seeing a user's entry of a PIN, and such panels could be made transparent so as not to obscure a promotional program being displayed, we conclude that those skilled in the art would have been motivated to embody White's barriers as electrochromic panels. Therefore, we affirm the obviousness rejection of claim 3 and of claim 12, which falls therewith.

III. CONCLUSION

In summary, the rejections of claims 1-13 under § 103(a) are affirmed.

AFFIRMED

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